

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 6900370 B2
APPLICATION NO. : 09/749,601
ISSUE DATE : 05/31/05
INVENTOR(S) : NICOLAIDES, NICHOLAS C.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The drawing sheet, consisting of Figs. 1, should be deleted to be replaced with the drawing sheet, consisting of Figs. 1A, 1B, 1C, as shown on the attached pages.

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

SN. 09/749,601

PATENT NO.: 6,900,370 B2

^{Issue}
DATED: May 31, 2005

INVENTOR(S): Nicholas C. NICOLAIDES et al.

It is certified that errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In Column 2, Line 60:

Please delete "SEQ ID NO: 14" and insert -- SEQ ID NO: 12-- .

In Column 2, Line 63:

Please delete "SEQ ID NO: 16" and insert -- SEQ ID NO: 14-- .

In Column 2, Line 67:

Please delete "SEQ ID NO: 14" and insert -- SEQ ID NO: 12-- .

In Column 3, Line 3:

Please delete "SEQ ID NO: 16" and insert -- SEQ ID NO: 14-- .

In Column 3, Line 16:

Please delete "Fig. 1" and insert --Fig 1A, Fig 1B and Fig 1C.--.

~~NO In the Drawings, Sheet 1 of 13~~

~~Please delete Fig. 1 and insert Fig. 1A, Fig 1B and Fig 1C (seen below):~~

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U.S. PAT. NO

6,900,370

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1 70

humPMS2 (1) ATGCGCGGAGCTGAGAGCTGGAGTAAAGAAGCTGCTAAGGCC-----ATCAACCTATTCATCGCAAGT

AtPMS2 (1) ATGCAAGGAGATTCTTCTCCGCTCCGACGACTCTAGCTCTCCTTTGATAGACCTATAAACAAGAAACG

Consensus (1) ATG A GAG T CG T C CT CTA C AT A ACCTAT A G AA

71 140

humPMS2 (65) CAGTCCATCAGATTTCCTCTGGGCGAGGTGGTACTGAGTCTAAGCACTGCGGTAAAGGAGTTAGTAGAAAA

AtPMS2 (71) TATTCACAGAATCTGTTCGGTCAACTCACTTAGACCTCTCTTCGCGCTCAAGGAGCTTGTTCGAGAA

Consensus (71) A T CA AT TG TC GG CA GT T T CT C GC GT AAGGAG T GT GA AA

141 210

humPMS2 (135) CAGTCTGGATGCTGGTGGCCACTAATATGATCTTAAGCTTAAGGACTATGGAGTGGATCTTATTCAGTT

AtPMS2 (141) TAGTCTCGACCGCGCGGCCACAGTATAGAGATTAACTCCGAGACTACGGCGAAGACTATTTTCAGGTTC

Consensus (141) AGTCT GA GC GG GCCAC A TAT GA T AA CT GACTA GG G GA T TT A GT

211 280

humPMS2 (205) TCAGACAATCGATGTGGGT-----AGAAGAAC-----AAAACCTCGAAG-----G

AtPMS2 (211) ATTGACAATGGTGTGGCAATTTCCCAACCAATTTCAGGTTTGTGTCCAAATTTCTCGAAGAAGCTTTTG

Consensus (211) GACAATGG TGTGG T A AAG AA CT CGAAG G

281 350

humPMS2 (246) CTTAACCT---CTGAAACATCAACACCTAAGATCAAGAGTTTGGCGACCTAACTCAGGTTGAA-ACCT

AtPMS2 (281) ATGTTCTTGCACTTAAGCATCATCTCTCTAATAGAGGATTTCAAGATCTTTTGAATTTGACTACTT

Consensus (281) T CT CT AA CATCA AC TCTAA T A GA TT C GA CT T A TTGA ACTT

351 420

humPMS2 (311) TTGGCTTTTCGGGGGAAGCTCTGAGCTCACTTTGTGCACTGACCGATCTCACCATTCTCTACTG--CCAC

AtPMS2 (350) ATGGCTTTTAGAGGAGAAGCTCTGAGCTCTCTCTGTGCACTGGGAAATCTCAGTGTGGAAAGAAAGAA

Consensus (351) TGG TTT G GG GAAGC TGAGCTC CT TGTGCA TG G AT TCAC T AC G C A

421 490

humPMS2 (379) GCATCGGGGAGGTTGGAACTGACTGATGTTTGATCACAATGGGAAAAATTA-TCCAGAAAACCCCCTAC

AtPMS2 (420) GAATGAGCCA--TTTGCTACGGTCTTGACTTTTGATCATTCCTGGTTTGTCTTACTGTTGAAAAAGAGACTG

Consensus (421) G AT GC A GTTG AC C TGA GTTTGATCA TGG TTA T C GAAAA

491 560

humPMS2 (448) GCGCGCCCGAGGGGACCACAGTCAGCGTGCAGCAGTTATTTCCACACTACCTGTGCGCCATAGGGAT

AtPMS2 (488) CTC-GCCAAATTGCTACCACTCTCACTGTAGGAGGTTCTCTCTAATTTACCTGTACGAAGCAAGAGCT

Consensus (491) C C GCC A GG ACCAC GTCA GT G AGTT TT TC A TACCTGT CG AA GA T

561 630

humPMS2 (518) TTCGAAGGAATATTAAGAAGGAGTATGCCAAAAATCGTCCAGGTCTTACATGCATACGTATCATTTCAGC

AtPMS2 (557) TTAAGCGGAATATACGCAAGAGATATGGGAAGCTGTGTATCTTTATTGAACGCATATGCGCTATTTCGAA

Consensus (561) TT A GGAATAT AA GA TATG AA T GT T TT A GCAT T ATT C

631 700

humPMS2 (588) AGGCATCCGTGTAAGTTGCACCAATCAGCTTGGACAAGGAAAAACGACAGCCTGTGTATGCACAGCTGA

AtPMS2 (627) AGGAGTCCGCTTTGTCTGTCTTAACACGACTGGGAAA--AACCCAAAGTCTGTTGT-----GCTGA

Consensus (631) AGG T CG T TGC C AA G TGG AA AA C A AG CTGT GT G GA

701 770

humPMS2 (658) AGCCCGAGCATAAAGCAAAATATCGGCTCTGTGTTTGGCAGAAAGCAGTTGCAAAGCCTCATTCTTTTG

AtPMS2 (686) A---CA-CACAA-GGGA-----G-GG-----G

Consensus (701) A CA CA AA GG A G G G

771 840

humPMS2 (728) TTCAAGCTGCCCTTGTGACTCCGTGTGTGAAGAGTACGTTTGAGCTGTTCCGATGCTCTGCATAATCT

AtPMS2 (702) TTCA-----CT-TAAAGA--TAAT-----ATCTAAGAGTTT-----TCGGCATTTGTA

Consensus (771) TTCA C TA GA T A A AC GTTT TC GCAT A

841 910

humPMS2 (798) TTTTACATCTCAGGTTTCATTTACAATGCACGCATGCAAGTGGAAAGGAGTTCAACAGACAGACAGTTT

AtPMS2 (743) CCTTTACAGCTC-----TACA-GCCTGGTACTGGAGCAATTTAGCAGATCGACAGTAT

Consensus (841) TTTACA TC T CA GC TGG TGGA G A TT A CAGA GACAGT T

911 980

humPMS2 (868) TTCTTTATCAACCGCGGCCTTGTGACCCAGCAAAAGGTCTGCAAGACTCGTGAATGAGGTCTACCAATCT

AtPMS2 (796) TTCTTTATAAATGCTCGGCCTGTAGTATGCAAAAGTCAGCAAGTTCGTGAATGAGTTATTAAGAT

Consensus (911) TTCTTTAT AA G CGGCCT GA CAAA GTC GCA T GTGAATGAG T TA A A T

981 1050

humPMS2 (938) ATAA-TCCAGACCGATATCCATTGTGTCTCTTAACATTTCTGTGATTCAGAAATGCGTGTATATCAATG

AtPMS2 (865) ACAAGTCTCGGAATATCCAGTTACCATTTCTGGATTATTTGTTGCCGTTGGTGGAGCATGTCGATTGAATG

Consensus (981) A AA T C A TATCCA TT TTCT A TT TGT T G A TGAT T AATG

1051 1120

humPMS2 (1007) TTACTCCAGATAAAAGGCAAAATTTGCTACAAGAGCGAAAGCTTTTGTGGAGTTTAAAGACCTCTTT

AtPMS2 (935) TCACGCCCGATAAAAGAAAGGTTCTTTCTTCTGACGAGA--CTTCTGTTATCGGTT-----CTTT

Consensus (1051) T AC CC GATAAAG A T TT T GA GA A CTT TGTT C GTT CTTT

1121 1190

Figure 1A

humPMS2 (1077) GATAGGAATCTTTGATAGTGATGTCACACAGCTAAATGTCAGTCAGCAGCCACTGCTGGATGTTGAAGGT
 AtPMS2 (993) GAG-GGAAGGCTCTGA-----A-CGAGATATATTCG---T-----CCAGTAAAGCGTCTTATA---
 Consensus (1121) GA GGAA GT TGA A C AG TA AT C T CCA T TG T TT A
 1191 1260
 humPMS2 (1147) AACTTAATAAAATGTCATGACGCGATTGGAAAAGCCCATGGTAGAAAAGCAGGATCAATCCCTTCAT
 AtPMS2 (1040) ---TTGTTAATAGGTTCCAGGAGCAATTCGGAGCAACC-----AGATAAG---GCTGGAGTTTCTCTCT
 Consensus (1191) T T AA A G G G G ATT GGA A CC AGA AAG G T A C TC T
 1261 1330
 humPMS2 (1217) TAAGGACTGCGAGAAGAAAAAAGACGTGTCATTTCAGACTCCGACAGGCCTTTCTCTCTCTCACAC
 AtPMS2 (1097) TTC-----AGAAGAAATCAAA-----TCCTTTGTGAGAA-CGGATAG-----TTCTGGATGTCAGTT
 Consensus (1261) T AGAAGAAA AAA TC TT CAGA G GA AG TTCT GTCA
 1331 1400
 humPMS2 (1287) AACAGAGAACCAAGCCTCACAGCCCAAAGACCTCCAGAACCAAGAGAGGCCCTCTAGGACAGAAAAAGGGGT
 AtPMS2 (1148) CTAA---AACCAAGCT---AGGGGAGCTATGTAGAAAGAAATCCATTCCTTAAGGGAGGTTGAAATTCA
 Consensus (1331) A AACAAG CT AG AA T AGAA AA A A CC T GGA A A T G
 1401 1470
 humPMS2 (1357) ATGCTGTCTTCTGCACTTCAGCTGCCATCTCTGACAAAGGCGTCCCTGAGAGCTCAGAAAAGAGGAGTGA
 AtPMS2 (1212) TAATAGTTCCGCAATGGAGAAGTTTAAGTTTGAGATCAAGGCATG-TGGACGA-AGAAAGGGGAAG---
 Consensus (1401) GT C A AG T T T GA AAGGC T TG GAC AGAAAG GG AG
 1471 1540
 humPMS2 (1427) GTTCAGTCAACGGACCAGCTGACCTACGGAAGACAGCGGAGGTCCAGAGGACTGGGGCCAGCGCAGCAAC
 AtPMS2 (1277) GTTCT---TTAT---CAGT---CCAT---GATGTAACTCACTTCAAG-ACACTGACAAAGGTTTTCG
 Consensus (1471) GTTC T A CAGT CC GA A C A T GA AAG AC C GCA G C
 1541 1610
 humPMS2 (1497) TTCCTGGATTCTGAGGGTTTCAGCATCCAGACACGGGAGTCACTCAGCAGCGAGTATGCGGCCAGC
 AtPMS2 (1334) CTCAGTTAATGTGACTG-----AGA-----AGTTACTGATGCA-AGTA-----TAG
 Consensus (1541) TC GT A T TGA G AGA AGT ACTG GCA AGTA A
 1611 1680
 humPMS2 (1567) TCCCCAGGGGACAGGGGCTCGCAGGAACATCTGGACTCTCAGGAGAAAGCGCTGAAACTGACGACTCTT
 AtPMS2 (1376) AGTTGAG---CAGCCGCTCT---A-GCTTTGCCAGTCA-----ACTT---TGAATACTTTT
 Consensus (1611) C AG CAG GCTC A T TG C TCA CT TGA ACT TT
 1681 1750
 humPMS2 (1637) TTTCAGATGTGACTGCCATTCAAAACAGGAAGATTCGGGATGTAAATTTTCGAGTTTTCCTCAGCCAAC
 AtPMS2 (1423) GTTACCATGGG-----AAA-----AAGAAAC-ATGAAAA-----CATAAGG-AC
 Consensus (1681) TT ATG G AAA AAGA A C ATG AAA C T AGC AC
 1751 1820
 humPMS2 (1707) TATCTCTGCAACCCCAACACAAAGCGTTTAAABAAAGAGAAATCTTTCAGTTCTGACATTTGTCAC
 AtPMS2 (1461) CATCTCTCTG---AAACACCT---GTCTTCAGAAACCA-AACTTCT---AGTTAT---GTTGTCGAG
 Consensus (1751) A CTC C AAACAC GT T A AAA A AA TTCT AGTT T C T TG A
 1821 1890
 humPMS2 (1777) AAGTTAGTAAATACTCAGGACATGTCAGCCCTCTCAGGTTGATGTAGCTGTGAAAATTAATAAGAAAGTTG
 AtPMS2 (1517) AA---AGCAAATTTGAAGTTCTGTG-----CTTAGCTTCA-AGGTGT-----CTCGT---GAAGGCG
 Consensus (1821) AA AG AAAT AG C TG CT AG TT A AG TGT T T G AAG G
 1891 1960
 humPMS2 (1847) TGCCCTGGAATTTCATGATTTCTTTAGCTAAACGAATAAAGCAGTTACATCATGAAGACAGCAAG
 AtPMS2 (1568) ATCAACTTGA---TGATATG-G---TCATCTCAAG---GAAGATATGACCAAGG---AAAG
 Consensus (1891) C CT GA T TATG G T A CT AA G G AG TA CA AAGC AAAG
 1961 2030
 humPMS2 (1917) TGAAGGGGAACAGAATTACAGGAGTTTAGCGCAAAAGATTGTCCTGGAGAAATCAAGCAGCCGAGAT
 AtPMS2 (1620) AGATTCTGAAC-----AGGCAATC---G-----GATTTCTCCTGGAACA---CAAGCTGATATGTT
 Consensus (1961) GA GAAC AGG A T G GATTT TCCTGGA A CAAGC G A G T
 2031 2100
 humPMS2 (1987) GAACTAAGAAAAGAGATTAAGTAAAGATGTTTGCAGAAATGAAATCATTTGGTCAGTTTAACTTGGGAT
 AtPMS2 (1672) GAA---AGACATGAGAGA-GTA---C-----TCGGGCAATTCATCTTGGGT
 Consensus (2031) GAA AGA A GAGA A GTA C T GG CA TT AA CT GG T
 2101 2170
 humPMS2 (2057) TTATAATAACCAAACTGAATGAGGATATCTTCATAGTGGACAGCATGCCACGGACGAGAAAGTAACTT
 AtPMS2 (1712) TCATCATTTGCAAAATTTGGAGCGAGATCTGTTTCATTGTGGATCAGCATGCAGCTGATGAGAAATTCACCT
 Consensus (2101) T AT AT C AAA TG A GAT T TTCAT GTGGA CAGCATGC C GA GAGAA T AACTT
 2171 2240
 humPMS2 (2127) CGAG-ATGCTGCAGCAGCAACCGTGTCTCCAGGGGCAGAGGCTCATAGCA-CCTCAGACTCTCAACTTAA
 AtPMS2 (1782) CGAACATTTAGCAAGGTCA-ACTGTCTTGAACCAAGCA-ACCCTTACTCCAGCCTTTGAACCTTGGACTCT
 Consensus (2171) CGA AT GCA CA AC GT CT A GCA A CT A CA CCT GA T A T
 2241 2310
 humPMS2 (2195) CTGCTGTTAATGAAGCTGTTCTGATAGAAAATCTGGAAATATTAGAAAGCAATGGCTTTGATTTTGTAT
 AtPMS2 (1850) CTCCAGAGAGAGAAGTAAGTGTCTTAATGCATGGATATATCAGGCAAAATGGCTTTCTCTCAGAGGA
 Consensus (2241) CT C G A GAAG T TG TA A TGGA AT T AG A AATGGCTTT T T G
 2311 2380

Figure 1B

humPMS2 (2265) CGATGAAATGCTCCAGTCACTGAAAGGGCT--AACTGATTTCCTTGCCAACTAGTAAAACTGGACCT
 AtPMS2 (1920) GAATCCAACTGCTTCC--TCCCGAAACACTTTAGACTACGAGCCATTCCCTTAGCAAGAAATATCACCT
 Consensus (2311) AT AA TGCTCC TC C GAAA CT A ACT CC T CC TAG AA AA ACCT
 2381 2450

humPMS2 (2333) TCGGACCCAGGACGTCGATGAATGATCTCTCTGCTGAGCGACAGCCCTGGGG-----TCATGTGCCTGG
 AtPMS2 (1988) TTGGAGTCCAGATCTTAAAGACCTGATCTCACTCTAGGAGATAACCAATGGGGAAATGTTCGGTTGGTAG
 Consensus (2381) T GGA C A GA T A GA CTGATCT A CT G GA A CC TGGGG TC TGC G
 2451 2520

humPMS2 (2398) -----CCTTCCTCGAGTCAAGCAGATCTTTCCTCCAGAGCC
 AtPMS2 (2058) TAGCTACAAAACCAGCAAAACAGATTCGATTGTCTCATCAGAGTCCTGCAATCTAGGATCCCGAGCA
 Consensus (2451) CC TC CGAGTC ATG T GC TCC GAGC
 2521 259

humPMS2 (2434) TGGCCGAAGTCGGTGATGATGGGACTTGGCTCTTACACAAAGCGAGATGAGAAACTGATCACCACATGG
 AtPMS2 (2128) TGCAGATCATCTCTGTATGATCGGAGATCCACTCGAAGAAACGAAATGCAGAAAGATAGTAGAACACATGG
 Consensus (2521) TGC G TC GTGATGAT GG T C CT A A AA CGA ATG AGAA T T CAC TGG
 2591 2660

humPMS2 (2504) GGGAGATGGACCCACCCCTGGAACTGTCCCATGGAAGGCCAACCATGAGACACATCCCAACCTGGGTGT
 AtPMS2 (2198) CAGATCTCGAATCTCCTTGGAAATGCCACACGGACCGCAACAATCCGTCTCTTTGGTGAATGACAA-
 Consensus (2591) GA T GA CC TGGAA TG CC CA GGA G CCAAC ATG G CA T G AC TG
 2661 2730

humPMS2 (2574) GATTTCCTCAGAAC-----
 AtPMS2 (2267) CTTTACTCATTACCTGATGACGACAATGTCAATGATGATGATGATGATGATGCAACCATCTCATTTGGC
 Consensus (2661) C TT CTCA A
 2731

humPMS2 (2587) ----
 AtPMS2 (2337) ATGA
 Consensus (2731)

Figure 1C